

In Malaya it is generally met with in "compounds" using as supports the stems of the palms, in other cases stakes are used, trellis work or anything which will allow them to climb. Attention is always paid to maintaining a sufficiency of shade overhead.

The cultivation of the two plants discussed above is essentially undertaken by natives and is without doubt a purely native industry. Unfortunately statistics are not available as to the export trade in "betel nut" but it is certain that with the large amount of native labour in the country and the decrease in acreage under "betel nut" the exports must be considerably less than in past years. There is no export trade carried on with "betel leaf."

F. FLIPPANCE.

Some Trials of Food Plants in the Economic Gardens III.

The Sword Bean.

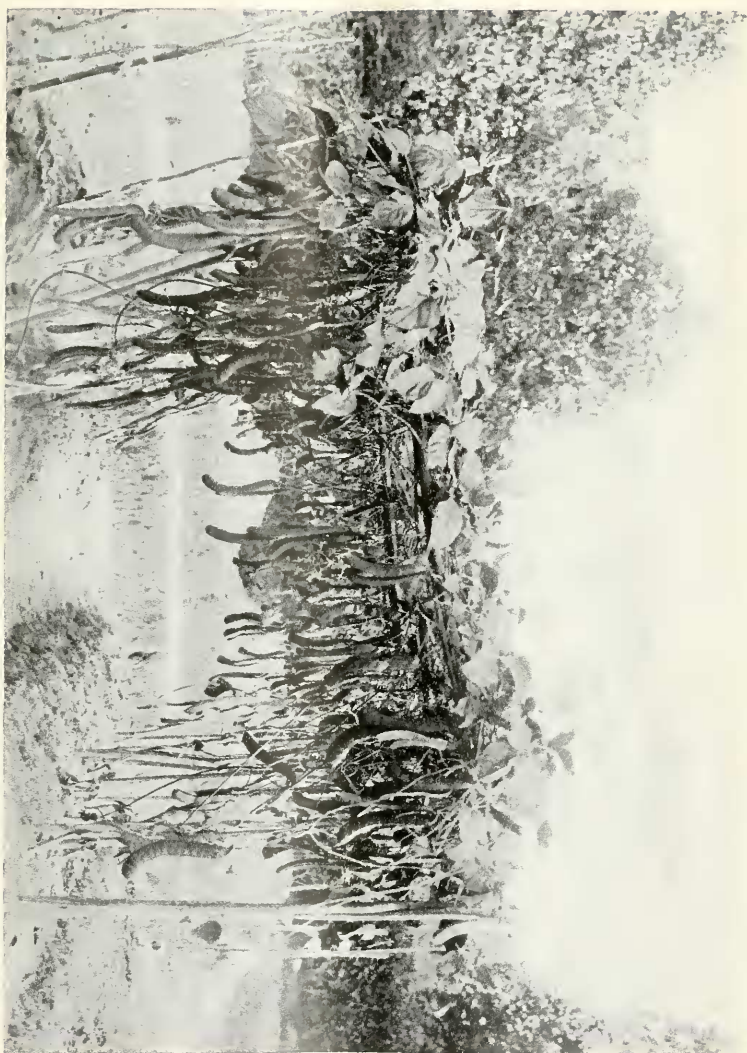
(*Canavalia ensiformis*).

The Sword-beans seen in the accompanying plate were introduced into the Economic Gardens from Japan in February, 1919. Its cultivation has now been brought to the fifth generation and shows by its remarkably heavy crops its adaptability to our local conditions. A local sword-bean is frequently seen growing in Malaya, the difference between this and the Japanese being in the colour of the flowers, which is mauve in the Japanese plant, and white in the local one; and in the seeds, the local bean being bright ruby-red in colour, and the Japanese pale pink. A third white-seeded variety, the seeds of which were procured from Mr. W. Dunman of Grove Estate, is also grown in the Economic Gardens. It is a plant of very robust growth with large handsome mauve flowers and it fruits profusely: it is popularly known as "Owen's Bean" from the name of the popular Secretary of the S. C. C.

The plot, on which the plants were grown, is on the lower edge of a hillside, a piece of yellow stiffish clay, but self-draining by its position. It had been manured six months previously and had given a crop of Roselle. A liming, a good breaking-up with the changkol, and a finish-off with the rake made it a first-rate bed for the sword-bean, which thrives better in a fairly firm clay bottom than on a sandy one.

The seeds were planted three feet apart on rows 2 feet apart, being sown with the eye (hilum) down at a depth of 3 inches. Contiguous to this plot, another bed was planted with seeds of the local sword-beans.

In both cases, the growth was very rapid and 4 weeks after sowing a frame of supports had to be put up with transverse sticks overhead, to train the fast climbing vines, and support the mass of foliage.



Sword bean, *Canavalia ensiformis*.